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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,266	01/14/2004	George Koutlakis	030901	4897
26285	7590	11/23/2005		
KIRKPATRICK & LOCKHART NICHOLSON GRAHAM LLP 535 SMITHFIELD STREET PITTSBURGH, PA 15222			EXAMINER MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1755	
DATE MAILED: 11/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/757,266	Applicant(s) KOUTLAKIS ET AL.	
	Examiner Michael A. Marcheschi	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 33-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/14/05 has been entered.

Applicants are reminded that the status identifier of claims 9 and 41 is improper because it does not define that the claims are withdrawn, even though they are amended. However, to advance prosecution, they are being viewed as being withdrawn.

Claims 15-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15 and 16 are indefinite as to the limitation "to form (polysaccharide) fragments...to form the agitating media (see process steps) because this does not make sense.

Claims 15-32 are rejected under 35 U.S.C. 103(a) as obvious over Koutlakis et al. (257) in view of Rosenflanz and Blanton et al.

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Koutlakis et al. teaches in column 2, lines 9-11, column 3, line 32-column 6, line 40 and the claims, polysaccharide abrasive grits which are made by the same steps of instant claim 16. It is also shown that polysaccharide abrasive grits are known to be cross-linked. The resulting grits have a hardness and moisture content within the claimed range.

Rosenflanz teaches in section [0110] that abrasive applications include milling media.

Blanton et al. teach in the abstract that milling media is known to have a size of 0.1-20 mm

Koutlakis et al. teaches polysaccharide abrasive grits which are made by the same steps of instant claim 16 and the use of a cross linking agent and corresponding method of instant claim 15 are obvious to the skilled artisan because the reference teaches in the background that cross linking polysaccharides are known and thus it use in the reference method and composition is obvious to the skilled artisan absent evidence to the contrary. One skilled in the art would have appreciated the time of reaction in order to optimize the resulting cross linked product. With respect to the polysaccharide being fragments (as a limitation of the claims), it is the examiners position that during crushing of the resulting material, fragments will be apparent. Although this reference does not explicitly define that the abrasive can be an agitating (milling) media or the claimed size, the independent claims of the references limit the polysaccharide to only abrasive grit particles (no application defined) and do not limit the size, thus the broad interpretation of the claims is that the polysaccharide can have a broad size and is not limited to the specific size and or use defined in the specification. **Since a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421, it is the examiners position that claim 1 of the reference**

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realistically teaches polysaccharide grits that are not limited in size or application. If the reference claim only intended to make polysaccharide grits of the size defined in the specification, **the claim would have recited said size**. The application and size would have been appreciated by the skilled artisan depending on the application desired by the end user. To support the examiners position that the application (milling media) would have been obvious, the examiner refers applicants to Rosenflanz et al. which clearly discloses that abrasive grit particles are known for milling media. In view of this, one skilled in the art would have appreciated that the abrasive grit according to the primary reference can be used as milling media, especially since the independent claim of the reference does not limit the sizes or application. In addition, although a specific use is defined, this is defined in the examples, thus the primary reference is not limited to this. With respect to the size, since the use of the grit according to the primary reference is obvious as a milling media for the reason defined above and milling media are known to have a size within the claimed range, as is clearly shown by Blanton et al., one skilled in the art would have appreciated the size required for the milling media of the combined references of Koutlakis et al. in view of Rosenflanz et al. The size again is dependent on the application and result sought, since Blanton et al. teaches a conventional size for milling media, this size would have been well within the scope of the skilled artisan. The examiner acknowledges that the media according to Rosenflanz et al. and Blanton et al. are not polysaccharide materials but, irrespective of what the media is made of, these references teach the concept of using abrasive grit particles as milling media and the examiner is relying on this concept alone.

With respect to the product by process claims, the claimed product appears to be the same, absent evidence to the contrary.

With respect to claim 32, the use of two or more milling media materials in combination would have been obvious because it is prima facie obvious to combine two or more materials disclosed by the prior art to form a third material (mixture of milling media materials) that is to be used for the same purpose. In re Kerkhoven 205 USPQ 1069. Since the above combination suggests that polysaccharide abrasive grits are milling media materials and the other media materials of claim 32 are known, as shown by the 2 secondary references, the combination is well within the scope of the skilled artisan as defined above.

With respect to the other dependent claims, all of said limitations are disclosed by the primary reference.

Claims 15, 17, 18, 20, 22, 24 and 26-27 are rejected under 35 U.S.C. 103(a) as obvious over Lane et al. (068) in view of Rosenflanz and Blanton et al.

Lane et al. teaches in column 3, line 59-column 8, line 50 and the claims, polysaccharide abrasive grits which are made by the same steps of instant claim 15. The resulting grits have a hardness and moisture content within the claimed range.

Lane et al. teaches polysaccharide abrasive grits which are made by the same steps of instant claim 15. With respect to the polysaccharide being fragments (as a limitation of the claims), it is the examiners position that during crushing of the resulting material, fragments will be apparent. Although this reference does not explicitly define that the abrasive can be an agitating (milling) media or the claimed size, the independent claims of the references limit the

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polysaccharide to **only** abrasive grit particles (no application defined) and do not limit the size, thus the broad interpretation of the claims is that the polysaccharide can have a broad size and is not limited to the specific size and or use defined in the specification. **Since a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421, it is the examiners position that claim 1 of the reference realistically teaches polysaccharide grits that are not limited in size or application.** If the reference claim only intended to make polysaccharide grits of the size defined in the specification, **the claim would have recited said size**. The application and size would have been appreciated by the skilled artisan depending on the application desired by the end user. To support the examiners position that the application (milling media) would have been obvious, the examiner refers applicants to Rosenflanz et al. which clearly discloses that abrasive grit particles are known for milling media. In view of this, one skilled in the art would have appreciated that the abrasive grit according to the primary reference can be used as milling media, especially since the primary reference states that the grit can be used in **abrasive applications** and the independent claim of the reference does not limit the sizes or application. In addition, although a specific use is defined, this is defined as an example, thus the primary reference is not limited to this. With respect to the size, since the use of the grit according to the primary reference is obvious as a milling media for the reason defined above and milling media are known to have a size within the claimed range, as is clearly shown by Blanton et al., one skilled in the art would have appreciated the size required for the milling media of the combined references of Koutlakis et al. in view of Rosenflanz et al. The size again is dependent on the application and result sought, since Blanton et al. teaches a conventional size for milling media,

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this size would have been well within the scope of the skilled artisan. The examiner acknowledges that the media according to Rosenflanz et al. and Blanton et al. are not polysaccharide materials but, irrespective of what the media is made of, these references teach the concept of using abrasive grit particles as milling media and the examiner is relying on this concept alone.

With respect to the product by process claims, especially claim 27, the claimed product appears to be the same because process limitations used to define the product in product by process claims do not patentably distinguish the product.

With respect to the dependent claims, all of said limitations are disclosed by the primary reference.

Claims 16, 19, 21, 23, 25 and 27-32 are rejected under 35 U.S.C. 103(a) as obvious over Lane et al. (068) in view of Koutlakis et al. and further in view of in view of Rosenflanz and Blanton et al.

In addition to the teaching defined above, Lane et al. implies in the examples that the an aqueous dispersion of polysaccharide is heated to form a gel, cooled and subdivided (broken up). It is the examiners position that once the product is removed from the oven, it is cooled to an extent. This reference, however, fails to teach the amylase content.

Lane et al. teaches polysaccharide abrasive grits which are made by the same steps of instant claim 16, with the exception of defining the amylase content. This however is obvious to the skilled artisan because Lane et al. use amylaceous polysaccharide and it is the examiners position that this implies that the polysaccharide contain amylase. The content of amylase would

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have been appreciated by the skilled artisan because the claimed content is known for polysaccharide that are to be made into abrasive grits, as shown by Koutlakis et al. The absence of a specific teaching in the primary reference suggests conventional contents known and since the claimed content is conventional, as shown by Koutlakis et al., this would have been appreciated by the skilled artisan. With respect to the polysaccharide being fragments (as a limitation of the claims), it is the examiners position that during crushing of the resulting material, fragments will be apparent. Although this reference does not explicitly define that the abrasive can be an agitating (milling) media or the claimed size, the independent claims of the references limit the polysaccharide to **only** abrasive grit particles (no application defined) and do not limit the size, thus the broad interpretation of the claims is that the polysaccharide can have a broad size and is not limited to the specific size and or use defined in the specification. **Since a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421, it is the examiners position that claim 1 of the reference realistically teaches polysaccharide grits that are not limited in size or application.** If the reference claim only intended to make polysaccharide grits of the size defined in the specification, **the claim would have recited said size**. The application and size would have been appreciated by the skilled artisan depending on the application desired by the end user. To support the examiners position that the application (milling media) would have been obvious, the examiner refers applicants to Rosenflanz et al. which clearly discloses that abrasive grit particles are known for milling media. In view of this, one skilled in the art would have appreciated that the abrasive grit according to the primary reference can be used as milling media, especially since the primary reference states that the grit can be used in **abrasive**

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applications and the independent claim of the reference does not limit the sizes or application.

In addition, although a specific use is defined, this is defined as an example, thus the primary reference is not limited to this. With respect to the size, since the use of the grit according to the primary reference is obvious as a milling media for the reason defined above and milling media are known to have a size within the claimed range, as is clearly shown by Blanton et al., one skilled in the art would have appreciated the size required for the milling media of the combined references of Koutlakis et al. in view of Rosenflanz et al. The size again is dependent on the application and result sought, since Blanton et al. teaches a conventional size for milling media, this size would have been well within the scope of the skilled artisan. The examiner acknowledges that the media according to Rosenflanz et al. and Blanton et al. are not polysaccharide materials but, irrespective of what the media is made of, these references teach the concept of using abrasive grit particles as milling media and the examiner is relying on this concept alone.

With respect to claim 32, the use of two or more milling media materials in combination would have been obvious because it is prima facie obvious to combine two or more materials disclosed by the prior art to form a third material (mixture of milling media materials) that is to be used for the same purpose. In re Kerkhoven 205 USPQ 1069. Since the above combination suggests that polysaccharide abrasive grits are milling media materials and the other media materials of claim 32 are known, as shown by the 2 secondary references, the combination is well within the scope of the skilled artisan as defined above.

With respect to the other dependent claims, all of said limitations are disclosed by the primary reference.

Applicant's arguments with respect to claims 15-32 have been considered but are moot in view of the new ground(s) of rejection.

Although new rejections have been applied, the examiner makes the following comments.

On page 13 of the response (section "A") applicants make a statement with regard to the previous indefinite rejections. Since these rejections were not present in the office action dated 6/20/05, they have been withdrawn in view of the previous amendments.

With respect to any remarks based on Koutlakis et al. (257) and Lane et al. (068), new rejections have been applied. However, as argued by applicant, these reference are not limited to blasting media because Lane et al. (068) teaches an example of abrasive application in column 4, line 6+ and as is known "**a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments (i.e. example)**" See *In re Van Marter*, 144 USPQ 421. Although Koutlakis et al. only suggest blast media throughout the specification (i.e. examples), the claims of the reference do not limit the application and as defined in the above rejection, the use of this grit as a milling (agitating) media would have been appreciated by the skilled artisan.

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/05
MM

Michael A. Marcheschi
Primary Examiner
Art Unit 1755